

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P1357193

Luminaire Tested: 4ASL4-20VHE-3-92765-UNV_3000K

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-12)
Test Lab: INNOVATION CENTER
Issue Date: 2/17/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: 4ASL4-20VHE-3-92765-UNV_3000K
Description: 4FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND 3000K LEDS 3 ROW
Light Source: -
Ballast/Driver: -

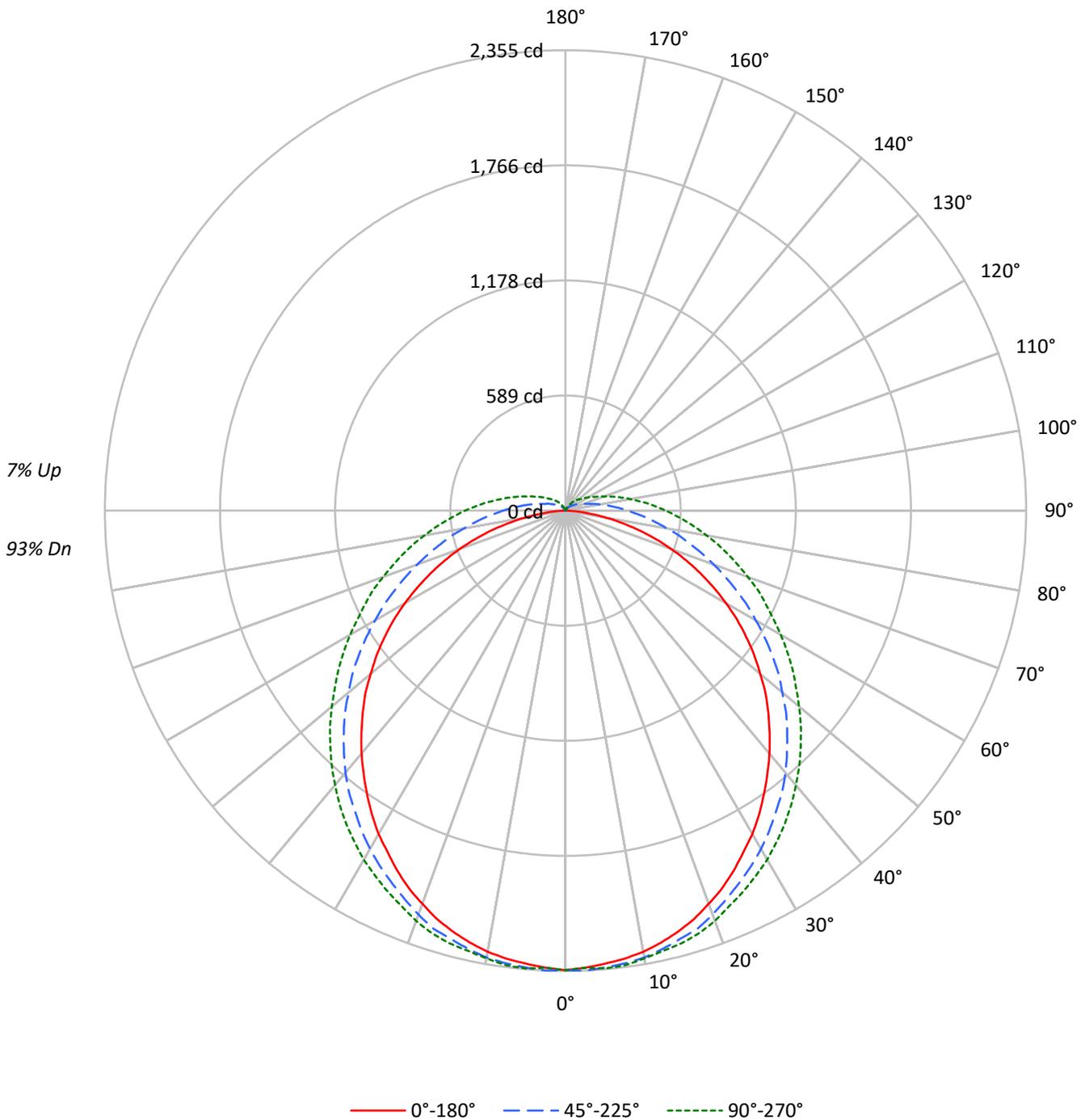
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7992.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 73.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	96	96	96	93
1	105	100	95	91	102	97	92	88	91	88	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	63	63	63	61
3	86	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	39	34	34	34	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	32	28	37	32	27	27	27	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	24	24	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19076	19076	19076
5°	18906	18717	18639
10°	18800	18353	18167
15°	18592	17902	17768
20°	18310	17469	17317
25°	17984	16925	16805
30°	17638	16454	16371
35°	17210	15921	15888
40°	16818	15433	15381
45°	16396	14842	14870
50°	15915	14207	14341
55°	15397	13601	13864
60°	14719	12895	13380
65°	13860	12214	12979
70°	12763	11539	12664
75°	11166	10923	12449
80°	8749	10460	12357
85°	5253	10349	12539

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16396 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.9	2.8
10°-20°	640.0	8.0
20°-30°	967.6	12.1
30°-40°	1171.6	14.7
40°-50°	1230.5	15.4
50°-60°	1148.0	14.4
60°-70°	948.8	11.9
70°-80°	683.1	8.5
80°-90°	424.5	5.3
90°-100°	248.7	3.1
100°-110°	142.3	1.8
110°-120°	80.4	1.0
120°-130°	46.2	0.6
130°-140°	24.9	0.3
140°-150°	10.5	0.1
150°-160°	1.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1830.5	22.9
0°-40°	3002.0	37.6
0°-60°	5380.6	67.3
0°-90°	7437.1	93.1
90°-120°	471.4	5.9
90°-150°	553.0	6.9
90°-180°	555.0	6.9
0°-180°	7992.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2351	2351	2351	2351	2351	
5°	2326	2346	2346	2346	2351	221
15°	2228	2258	2268	2282	2292	628
25°	2033	2067	2101	2131	2150	936
35°	1769	1818	1876	1930	1955	1107
45°	1466	1520	1603	1671	1701	1131
55°	1129	1192	1290	1383	1417	1009
65°	762	836	963	1085	1129	754
75°	391	489	660	801	860	413
85°	73	220	415	562	616	90
90°	0	132	318	454	513	3
95°	0	83	240	366	420	0
105°	0	29	132	230	269	0
115°	0	15	78	142	166	0
125°	0	10	49	93	108	0
135°	0	0	29	59	73	0
145°	0	0	15	34	39	0
155°	0	0	0	10	15	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2350.6	2350.6	2350.6	2350.6	2350.6
2.5°	2340.8	2355.4	2355.4	2340.8	2340.8
5°	2326.1	2345.7	2345.7	2345.7	2350.6
7.5°	2311.5	2335.9	2335.9	2335.9	2345.7
10°	2291.9	2316.3	2321.2	2321.2	2326.1
12.5°	2262.6	2291.9	2296.8	2301.7	2306.6
15°	2228.4	2257.7	2267.5	2282.1	2291.9
17.5°	2189.3	2223.5	2243.0	2257.7	2267.5
20°	2140.4	2174.6	2199.1	2218.6	2233.3
22.5°	2091.6	2120.9	2150.2	2174.6	2189.3
25°	2032.9	2067.1	2101.3	2130.6	2150.2
27.5°	1969.4	2008.5	2052.5	2086.7	2106.2
30°	1910.7	1949.8	1998.7	2042.7	2062.2
32.5°	1842.3	1886.3	1940.1	1984.0	2008.5
35°	1769.0	1817.9	1876.5	1930.3	1954.7
37.5°	1695.7	1744.6	1817.9	1871.6	1896.1
40°	1622.4	1671.3	1749.5	1808.1	1832.6
42.5°	1544.2	1593.1	1676.2	1739.7	1769.0
45°	1466.0	1519.8	1602.9	1671.3	1700.6
47.5°	1387.9	1441.6	1529.6	1602.9	1632.2
50°	1299.9	1358.5	1446.5	1529.6	1558.9
52.5°	1216.8	1275.5	1373.2	1456.3	1485.6
55°	1128.9	1192.4	1290.1	1383.0	1417.2
57.5°	1040.9	1104.4	1207.0	1304.8	1343.9
60°	948.0	1016.5	1124.0	1226.6	1270.6
62.5°	855.2	928.5	1045.8	1153.3	1197.3
65°	762.3	835.6	962.7	1084.9	1128.9
67.5°	669.5	747.7	884.5	1011.6	1065.3
70°	576.6	659.7	806.3	938.3	992.0
72.5°	483.8	571.8	733.0	869.9	923.6
75°	390.9	488.7	659.7	801.4	860.1
77.5°	298.1	410.5	596.2	737.9	796.5
80°	215.0	342.1	527.8	674.4	733.0
82.5°	136.8	273.7	469.1	615.7	674.4
85°	73.3	219.9	415.4	562.0	615.7
87.5°	24.4	171.0	361.6	508.2	562.0
90°	0.0	131.9	317.6	454.5	513.1
92.5°	0.0	102.6	278.5	410.5	464.2
95°	0.0	83.1	239.5	366.5	420.3
97.5°	0.0	68.4	210.1	327.4	376.3
100°	0.0	53.8	180.8	293.2	337.2
102.5°	0.0	44.0	156.4	259.0	303.0
105°	0.0	29.3	131.9	229.7	268.8
107.5°	0.0	24.4	112.4	205.2	239.5
110°	0.0	19.5	102.6	175.9	210.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	14.7	92.8	156.4	190.6
115°	0.0	14.7	78.2	141.7	166.2
117.5°	0.0	14.7	68.4	127.1	151.5
120°	0.0	9.8	63.5	112.4	136.8
122.5°	0.0	9.8	53.8	102.6	122.2
125°	0.0	9.8	48.9	92.8	107.5
127.5°	0.0	4.9	44.0	83.1	97.7
130°	0.0	4.9	39.1	73.3	88.0
132.5°	0.0	4.9	34.2	68.4	83.1
135°	0.0	0.0	29.3	58.6	73.3
137.5°	0.0	0.0	24.4	53.8	63.5
140°	0.0	0.0	19.5	44.0	58.6
142.5°	0.0	0.0	14.7	39.1	48.9
145°	0.0	0.0	14.7	34.2	39.1
147.5°	0.0	0.0	9.8	24.4	34.2
150°	0.0	0.0	4.9	19.5	24.4
152.5°	0.0	0.0	0.0	14.7	19.5
155°	0.0	0.0	0.0	9.8	14.7
157.5°	0.0	0.0	0.0	0.0	4.9
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.58	21.12	20.05	21.57	22.05	21.60	23.14	22.07	23.60	24.08
	3H	21.07	22.48	21.55	22.94	23.47	24.07	25.47	24.55	25.94	26.46
	4H	21.55	22.89	22.06	23.37	23.91	25.26	26.59	25.77	27.08	27.61
	6H	21.83	23.07	22.34	23.57	24.12	26.52	27.76	27.03	28.25	28.81
	8H	21.88	23.07	22.41	23.59	24.15	27.16	28.35	27.69	28.87	29.43
	12H	21.90	23.03	22.43	23.55	24.14	27.87	29.01	28.41	29.53	30.12
4H	2H	20.45	21.78	20.96	22.27	22.80	22.04	23.37	22.54	23.85	24.39
	3H	22.19	23.32	22.70	23.85	24.41	24.73	25.86	25.24	26.39	26.95
	4H	22.79	23.83	23.33	24.37	24.96	26.09	27.13	26.63	27.67	28.26
	6H	23.19	24.11	23.75	24.67	25.28	27.54	28.46	28.09	29.02	29.62
	8H	23.28	24.15	23.85	24.71	25.33	28.29	29.15	28.85	29.72	30.34
	12H	23.33	24.11	23.91	24.70	25.33	29.13	29.91	29.71	30.50	31.12
8H	4H	23.47	24.34	24.03	24.90	25.52	26.31	27.17	26.87	27.74	28.36
	6H	24.05	24.78	24.65	25.39	26.01	27.93	28.66	28.52	29.26	29.89
	8H	24.23	24.89	24.84	25.51	26.15	28.82	29.48	29.42	30.09	30.73
	12H	24.35	24.94	24.96	25.54	26.25	29.84	30.43	30.45	31.03	31.74
12H	4H	23.67	24.45	24.25	25.04	25.67	26.32	27.10	26.90	27.69	28.32
	6H	24.35	25.01	24.95	25.62	26.26	27.96	28.62	28.57	29.24	29.88
	8H	24.63	25.22	25.23	25.82	26.52	28.92	29.51	29.53	30.12	30.82